

## **REMARKS**

Applicant would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office Action, and amended as necessary to more clearly and particularly describe the subject matter which applicant regards as the invention.

## **THE INVENTION**

The present invention is directed to a displacement measuring instrument, as discussed in detail in the present disclosure. As recited in claim 1, the present invention comprises an instrument body and a spindle penetrating the instrument body to be slidably supported by the instrument body. A lifting lever is manipulated from the outside to forcibly shift the spindle. A lever support is provided that supports an end of the lifting lever opposite to a drive end of the lifting lever that is in contact with the spindle.

It should be especially noted that the present independent claim 1 recites "an engaging member," provided on an outer circumference of the instrument body that detachably engages and supports the lever support. As set forth in detail in the present disclosure, this feature is incorporated to overcome a specific problem in the prior art.

As shown in Fig. 6, a "pressing member 50" is known in the prior art that extends out from the inside of the instrument body. However, it has been found that

minute dust particles can invade the instrument body of such a device, thereby affecting the precision of the instrument. To overcome this problem, as shown in Fig. 7, it was known in the art to mount a "lifting lever 70" to an instrument body using a "penetrating tap 61A." However, it was observed that, prior to assembly, there remained a possibility that minute dust particles could invade the instrument body through the tap hole, again affecting the precision of the instrument.

To overcome these problems, the present invention was devised to provide a displacement measuring instrument capable of improving dust-proofness and allow easy attachment of a lifting lever without a tool. With the present invention, the lifting lever is supported by the lever support, which is engaged and detachably supported by the engaging member provided on the outer circumference of the instrument body. Accordingly, no tap or other such hole is necessary on the instrument body for directly attaching the lifting lever on the instrument body by a screw or the like, so that the invasion of minute dust particles into the instrument body can be prevented, thereby improving dust-proofness of the device. Further, since the lever support can be attached to the engaging member only by engaging the lever support with the engaging member, the lifting lever can be easily attached without a tool. In view of the above, it should be apparent that the present invention is very different from the prior art relied upon by the Examiner.

### **THE REJECTIONS UNDER 35 U.S.C. § 103**

Claims 1-3 had been rejected under Section 103 as being unpatentable over Rank (U.S. Pat. No. 5,421,101) in view of Stevenson (U.S. Pat. No. 5,450,909).

Also, claim 4 had been rejected under Section 103 as being unpatentable over the above combination, further in view of Onoda (U.S. Pat. No. 6,187,242). These rejections are respectfully traversed, particularly as applied to the claims as presently amended.

The Examiner cites Rank, who discloses a crimp measuring gauge having a dial indicator and other components of a generic type similar to the prior art device illustrated in the present Fig. 7. The Examiner lists various elements in Rank alleged to read on the present claims. The Examiner then admits that "Rank does not disclose a lever support that supports an end of the lifting lever, etc." as recited in claim 1. The Examiner also admits that both the dovetail recited in claim 2 and the detachment stopper recited in claim 3 are not disclosed by Rank.

In view of the admitted deficiencies of Rank, the Examiner proposes a combination with Stevenson, which discloses a grade determining apparatus. This apparatus is mounted in a cab of an earth handling machine with a mounting assembly so that the apparatus can be easily removable to prevent theft and contamination by dust or water (col. 4, lines 32-34, cited by the Examiner).

Based on this thin disclosure, the Examiner proposes that,

*"(I)t would have been within the scope an ordinary skill in the art to modify the instrument disclosed by Rank by replacing the engaging member with a dovetail arrangement including a detachment stopper as taught by Stevenson in order to removably secure the device in place during use and allow easy removal for safe storage from theft."*

However, this supposition has no merit and cannot be relied upon as a demonstration of obviousness. Indeed, for a hand-held micrometer-type device as presently disclosed, it would seem that the entire unit would be removed to a secure location in order to deter theft of the device. It is unclear why, as suggested by the

Examiner, the removal of the present lever would act as a deterrent to theft. In this regard it is unclear why a thief would steal a handle (i.e., lever) from a device and leave the device itself.

At any rate, it strains credibility to suppose that a person having skill in the art would be guided by the grade determining apparatus of Stevenson to replace the thumb lever 250 of Rank in order to "allow easy removal and safe storage from theft," as proposed by the Examiner. There would clearly be neither motivation nor benefit to removing only the handle of the present device in order to prevent theft. It is therefore respectfully submitted that there is no motivation or suggestion in the art of record to combine the references in the manner proposed by the Examiner.

Further, even if the proposed combination could somehow be deemed appropriate, it would still fail to satisfy the requirements of the present invention. In the device of Stevenson, the entire apparatus is removably mounted to the wall of a vehicle cab. There is no disclosure or suggestion in Stevenson of the removability of only a single component of the apparatus. Therefore, even if Rank and Stevenson could be combined as proposed by the Examiner, one would still not arrive at a device with a engaging member that detachably engages the lever support as presently claimed, unless guided by a hindsight reading of the present disclosure. Rather, the combination of Rank and Stevenson could only reasonably result in an assembly for detachably securing the entire instrument body to a fixed support.

In any event, it should be clear that neither Rank nor Stevenson, taken alone or in combination, can be relied upon to show "an engaging member provided on an outer circumference of the instrument body that detachably engages and supports the lever support," as required by claim 1. Thus, these references do not provide an

engaging member that detachably engages a lever support as disclosed and claimed at present. In this regard it is noted that the instrument housing of Stevenson is perforated by numerous holes for screws, etc., and, therefore, it is clear that dustproofing is not a concern of the Stevenson device. Thus, it should be clear that Rank and Stevenson, taken either alone or in combination, teach away from the presently claimed invention.

In view of the above, it is respectfully submitted that claim 1 is patentable over the proposed combination of Rank and Stevenson. Reconsideration and withdrawal of the rejection of claim 1 is respectfully requested.

The dependent claims 2-4 recite additional features that further limit the subject matter of claim 1. It is therefore respectfully requested that these claims are allowable for at least the same reasons as independent claim 1. In connection with the rejection of claim 4 over the base combination in view of the Onoda patent, this reference has been reviewed. However, this reference does not supply structure that would correct the deficiencies of the combination applied against independent claim 1. Therefore, it is respectfully submitted that claim 4 is also patentable over this further combination of references. For at least these reasons, reconsideration and withdrawals of the rejections of the dependent claims is also respectfully requested.

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please  
charge same to our Deposit Account No. 18-0160, our Order No. KIN-15384.

Respectfully submitted,

RANKIN, HILL, PORTER & CLARK LLP

By

  
Jay P. Ryan

Agent for Applicant

Registration No. 37,064

4080 Erie Street  
Willoughby, Ohio 44094  
(216) 566-9700